DOCUMENT RESUME

ED 386 118 HE 028 526

AUTHOR Dudgeon, Carolyn; And Others
TITLE PHE Scholars Program Essays, 1995: Creating and Sustaining Learning Communities.
INSTITUTION Nova Southeastern Univ., Fort Lauderdale, FL. Center for the Advancement of Education.
PUB DATE 27 Jul 95
NOTE 31p.; Programs for Higher Education Scholars Program Essays, Nova Southeastern University.
PUB TYPE Dissertations/Theses - Undetermined (040) -- Collected Works - General (020)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Classroom Environment; College Instruction; *Community; Computer Assisted Instruction; Computer Networks; *Computer Uses in Education; Educational Attitudes; *Educational Trends; Higher Education; *Learning; Lifelong Learning; Student Needs; *Teacher Student Relationship
IDENTIFIERS *Learning Communities

ABSTRACT

These three essays focus on the creation and sustenance of learning communities among students and instructors at the college and university level. The essays are: (1) "Creating and Sustaining Learning Communities" (Carolyn Dudgeon), which emphasizes a seamless educational continuum for lifelong learners in a collaborative, caring environment that incorporates modern computer and multimedia technology; (2) "Creating and Sustaining Learning Communities: The PHE Scholars Program" (Timothy M. Sullivan), which emphasizes that the creation of learning communities requires a thorough understanding of the interplay among community building, group learning, systems thinking, personal mastery, mental models, shared vision, and leadership; and (3) "Creating and Sustaining Learning Communities: The Electronic Learning Community" (Gloria K. Wolfson), which emphasizes the role of computer technology in recreating learning communities, especially among part-time and nontraditional college students. Each essay contains references. (MDH)

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ED 386 118

Creating and Sustaining Learning Communities

PHE Scholars Program Essays 1995

HE028 526

Fischler Center for the Advancement of Education
Programs for Higher Education

July 27, 1995
Bonaventure Resort & Spa
Fort Lauderdale, Florida

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CREATING AND SUSTAINING LEARNING COMMUNITIES

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An essay presented to Nova Southeastern University as partial criteria for the PHE Scholars Program

Nova Southeastern University

April, 1995

TABLE OF CONTENTS

Page

INTRODUCTION 3

LEARNING COMMUNITIES 4

CREATING AND SUSTAINING LEARNING COMMUNITIES 5

SUMMARY 8

REFERENCES 9

INTRODUCTION

> It follows that when we no longer consider learning to be primarily the acquisition of knowledge, we can no longer view teaching as the bestowal of it. If learning is about growth and growth requires trust, then teaching is about engendering trust, about nurturance -- caring for growth. Teaching is thus pre-eminently an act of care (Daloz, 1986, p. 237).

How will colleges ensure that the teaching/learning process of the twenty-first century will include the caring, academic environment needed by adult learners for growth during the various transitions in their lives? To answer this question, colleges must re-examine their mission statements about quality and excellence in education. Millard (1991) views quality in an educational setting as the extent to which the institutions' and students' educational objectives are achieved. However, the meaning of quality and excellence associated with future college mission and value statements will not only be defined in terms of achievement of objectives, but also will symbolize a commitment to providing a "seamless educational continuum" (Ontario Ministry of Education and Training, 1993, p. 138) for lifelong learners in a collaborative, caring, environment that will incorporate multimedia electronic tools, world class software, the virtual classroom, distance learning, internet, and videoconferencing.

The alternative computer based curriculum delivery methodologies previously considered to be important for part time learners are being expanded in view of the current and future economic and social trends that affect both part time and full time adult learners. Adults in Canada need to pursue education and training activities to acquire the new, complex skills required for the jobs being created by the technological revolution and the restructuring of business and industry (Kubiski and Associates, 1994). Adult learners who are being

granted some college credits through the Ontario Council of Regents' (1992) prior learning assessment initiative, will also need access to college courses in order to complete the requirements for the credentials of their choice.

Many barriers prevent adult learners from attending full time day classes. Zuckernick (1989) describes the following reasons why Canadian adult learners require access to educational opportunities that allow them to study at their own times, paces, and places: full time or part time employment, shift work, home and family commitments, distance from a college campus, and winter weather conditions.

The key to accomplishing the new vision of excellence and quality in meeting the needs of adult learners through alternative computer based curriculum delivery methodologies will be in creating and sustaining learning communities.

LEARNING COMMUNITIES

McEwan's (1993) research into the definition of community revealed the Hellenistic Greek word koinonia meaning fellowship, partnership or something shared in common like common ideas. She considers a learning community to be a group of learners whose shared experiences have had profound meaning in their lives. These experiences included moderate hermeneutics described as "complex interchanges of interpretation found in the educational experience itself" (McEwan, 1993, p. 3). Her learning community was created on a foundation of trust and an intellectual journey that was sustained by a passion for learning.

Fulton (1988) describes learning communities as partnerships that are based on shared values, common goals, concern for the whole, collaboration, integration, openness, integrity,

and self-renewal. She views the empowerment of faculty and ongoing leadership development as important factors in creating a learning community. For her, teaching is at the centre of building communities of learning because good teaching revitalizes the college. Hill's (1988) fundamental principle of learning communities is that people must be given "the opportunity to work together and learn from each other, and to release the powers of human association" (p. 6).

CREATING AND SUSTAINING LEARNING COMMUNITIES

Before teachers can create learning communities with students, they may need to participate in learning communities themselves. The National Institute of Education (1988) recommends that learning communities be organized around specific themes or intellectual tasks. The changing teacher role, resulting from the paradigm shift from traditional classroom instruction to computer based alternative curriculum delivery methodologies, would be an ideal theme for a college pilot project in creating a learning community. Hannafin and Savenye (1993) describe the new role of the teacher as facilitator, coach, organizer, manager of information, selector of software, and advisor/creator of the interactive environment. In order to create this learning community, one would act as the initial facilitator and mentor using a framework that integrates the models of leadership, humanistic change, and computer based instruction, with a personal philosophy of leadership and adult education.

The creation of a learning community would begin with Lippitt's (1981) humaneness model for change. The community members would have an opportunity to hear and understand the rationale for using alternative computer based curriculum delivery

methodologies. In a climate of trust and caring, the learning community would be able to consider how the future teaching methods would differ from the current ones. They would be able to express fears, anxieties, hopes, wishes, and expectations about the new teacher role.

Through the learning community experience, teachers would be able to develop a vision of their changing role. Kouzes and Posner (1987) use the word vision to mean "an ideal and unique image of the future" (p. 85). For these authors, vision implies values, a standard of excellence, uniqueness, and a future direction. Vision according to Kotter (1990) is establishing direction and planning strategies to accomplish the vision. Exploring vision could help the realization of hopes and dreams (Kouzes and Posner).

The learning community would need some time for professional development activities related to alternative computer based curriculum delivery methodologies. Together learning community members would have the opportunity to explore software, hardware, teacher responsibilities, and student responsibilities. They could also consider several existing computer based instructional models from the literature. For example, Billings' (1987) strategy addresses questions related to the quality and cost effectiveness of computer assisted instruction (CAI): Is CAI consistent with values?; Does CAI meet the needs of the user audience?; and What teaching/learning activities occur during CAI use?" (p. 50). The learning community could also explore Bluhm's (1987) and Billings' factors necessary to implement CAI such as learning outcomes, cost effectiveness, organization, student scheduling, hardware, and software.

Professional development activities in an environment of trust, sharing, and collaboration would empower teachers by giving them the technological tools for their new teacher role, while building relationships with mentors and sponsors (Kouzes and Posner, 1987). Lippitt's (1981) humaneness model for change supports preparation and training that includes peer teams as support systems.

Following professional development activities, the learning community would be able to develop a plan to introduce alternative computer based curriculum delivery methodologies into their courses. Members of the learning community would be encouraged to celebrate small successes throughout their learning process. Both Kouzes and Posner (1987) and Lippitt (1981) state that celebration and recognition ensure the renewal and continuation of energy and momentum for the project.

Teacher participants would be able to create and sustain learning communities with students and function as mentors for other teachers who wish to create learning communities. These skills would be essential when guiding students through the combinations of computer based and traditional teaching methodologies. Once established, a learning community could continue for an indefinite period of time or community members could revise the vision and develop new goals.

A personal philosophy of adult education based on Hiemstra's (1988) model and the leadership models of Covey (1991), Kotter (1990), and Kouzes and Posner (1987) would be an asset to a mentor or facilitator in creating and sustaining a learning community. An example of this type of philosophy would include the following statements: belief in an eclectic

philosophical system that includes humanism, progressivism, and behaviorism; belief that a process of lifelong learning is necessary for continual growth; belief in the dignity and worth of the individual; belief that all individuals are entitled to respect, basic rights and freedoms, fair treatment, quality health care and education; belief in an overall educational goal that centers around developing vision and strategies to move others toward innovative teaching methodologies; and belief that a climate of trust, collaboration, sharing, and caring is essential to enable people to learn and grow.

SUMMARY

Creating and sustaining learning communities will be a significant component of the teaching/learning process as Toffler's (1980) Third Wave moves toward the twenty-first century. Technological tools for education will change the teacher's role to facilitator, mentor, and instructional designer. Students will work independently with interactive computer based instructional materials and communicate with the teacher/advisor and other students either in person or through electronic methods. What better way to provide students with the problem-solving, critical thinking, human relations, and learning how to learn skills that will be required in the new workplace of the future, than by creating and sustaining learning communities of teachers and students in colleges?

"For more than any other factor it is the partnership of teacher and student that finally determines the value of an education. In the nurture of that partnership lies the mentor's art" (Daloz, 1986, p. 244).

REFERENCES

Billings, D. M. (1987). Evaluating computer-assisted instruction: Nursing Outlook, 32(1), 50-52.

Bluhm, H. (1987). Computer-management instruction: A useful tool for educators?: Educational technology, January, 7-11.

Covey, S. R. (1991). Principle-centered leadership. New York: Fireside.

Daloz, L. (1986). Effective teaching and mentoring. San Francisco: Jossey-Bass Publishers.

Fulton, P. (1988). Community college connections. Washington, D.C.: Washington Centre for the Improvement of the Quality of Undergraduate Education: Final Report to the Ford Foundation. (ERIC Document Reproduction Service No. ED348074).

Hannafin, R. & Savenye, W. (1993). Technology in the classroom: The teacher's new role and resistance to it. Educational technology. June, 26-30.

Hiemstra, R. (1988). Translating personal values and philosophy into practical action. In R.G. Brockett (Ed.), Ethical issues in adult education (pp. 178-194). New York: Teachers College, Columbia University.

Hill, P. (1988). The rationale for learning community. Washington, D.C.: Washington Centre for the Improvement of the Quality of Undergraduate Education: Final Report to the Ford Foundation. (ERIC Document Reproduction Service No. ED348074).

Kotter, J. P. (1990). A force for change. Ontario: Maxwell Macmillan Canada, Inc.

Kouzes, J. & Posner, B. (1987). The leadership challenges. San Francisco: Jossey-Bass Publishers.

Kubiski, W.S. & Associates. (1994). Conestoga College continuing education operational review report. Toronto, Ontario: W.S. Kubiski & Associates Ltd.

Lippitt, R. (1981). Humanizing planned changes. In H. Meltzer & W. Nord. (Eds.), Making organizations humane and productive, a handbook for practitioners. (pp 463-474). New York: Wiley.

McEwan, A. (1993). On becoming a sojourning community. Tallahassee, Florida: Florida State University. (ERIC Document Reproduction Service No. ED359914).

Millard, R. (1991). Today's myths and tomorrow's realities. San Francisco: Jossey-Bass Publishers.

National Institute of Education. (1988). Newsletter. Washington, D.C.: Washington Centre for the Improvement of the Quality of Undergraduate Education: Final Report of the Ford Foundation. (ERIC Document Service No. ED348075).

Ontario Council of Regents. (1992). Prior learning assessment. Toronto: Allyn and Bacon.

Ontario Ministry of Education and Training. (1993). No dead ends: Report of the task force on advanced training to the Minister of Education and Training. Toronto: Ontario Ministry of Education and Training.

Toffler, A. (1980). The third wave. Toronto: Bantam Books, published in association with William Morrow & Co., Inc.

Zuckernick, A. (1989). Open learning and distance Education in Canada. Ottawa: Department of the Secretary of State of Canada.

CREATING AND SUSTAINING LEARNING COMMUNITIES

PHE Scholars Program

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An essay presented to Nova Southeastern University in

partial fulfillment of the application criteria

for the 1995 PHE Scholars Program

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March 30, 1995

Creating learning communities, we are discovering, requires fundamental shifts in how we think, interact, and view the world around us. According to Kofman and Senge (1993), the creation of learning communities requires a thorough understanding of the interplay among community building, group learning, systems thinking, personal mastery, mental models, shared vision, and leadership. "Nothing happens without personal transformation, and the only safe space to allow for this transformation is a learning community" (Kofman and Senge, p. 5).

Senge (1994) suggests that the changes involved in creating learning communities go beyond individual corporate and community cultures, or even beyond the culture associated with Western influence; they penetrate to the very core of the assumptions and habits of our culture as a whole. Several authors have suggested that we have drifted into a culture that fragments our thoughts and actions, that detaches the world from self and the self from its community (Bellah, Madsen, Sullivan, Swidler, and Tipton, 1985; Peck, 1987; Senge, 1994; Wheatley, 1994). Senge (1990) argues that the main dysfunctions in our institutions--fragmentation, competition, and reactiveness-- are actually byproducts of our success over thousands of years in conquering the physical world and in developing our scientific, industrial culture. Ryan (1994) suggests that learning communities can help to transform us from a fragmented state to one where members of a community acting in concert see the world as whole.

What is the place of "community" in creating and nourishing learning communities? First, we need to recognize that communities are diverse entities, multidimensional in scope

and perspective (Bellah et al., 1985; Peck, 1987; Warren & Lyon, 1988). It is through this diversity and scope that learners find opportunities to engage in purposeful learning (Galbraith, 1990). As citizens, we are continuously involved in a process of acquiring knowledge, developing skills, and reflecting on our experiences. Peck (1987) views community as a place where a group of individuals have learned to "communicate honestly with each other, whose relationships go deeper than their masks of composure" (p. 59). In these communities, individuals have come together and are committed to celebrating together, mourning together, and risking together. As we develop and nurture these kinds of relationships, we increase our capacity for learning collaboratively. Peck also stresses the linkage among openness to risk, an acceptance of human vulnerability, and the ability to live through community. Wheatley (1994) echoes a similar theme when she writes:

> I would be excited to encounter people delighted by surprises instead of the ones I now meet who are scared to death of them. Were we to become truly good scientists of our craft, we would seek out surprises, relishing the unpredictable when it finally decided to reveal itself to us. (pp. 142-143)

Ryan (1994), Solomon (1994), and Senge, Kleiner, Roberts, Ross, and Smith (1994) suggest that there cannot be learning without risk and vulnerability. If communities are a safe environment for risk and vulnerability, then those communities will be fertile ground for creating learning communities.

Bennis (1993) notes that community represents that place where people discover unity, learning and leadership. Gardner (1990) suggests a critical linkage among developing community, learning, shared values, and leadership. According to Kouzes and Posner (1994), community is the new metaphor of organizations. Like Gardner, Kouzes and Posner believe

that creating community requires promoting shared values and developing an appreciation for the value of living and working cooperatively and caring about one another.

The attributes of community described thus far do not alone result in the creation of learning communities. In fact, Kofman and Senge (1993) argue that there is no such thing as a learning community or a learning organization. This is because a learning community is a vision that sees the world as consisting of numerous interdependent factors and is ever - changing. It is always evolving. However, as we move from viewing fragmented pieces to seeing the whole, from self to community, from problem solving to creating, and from absolute truths to coherent interpretations, the potential for creating and sustaining learning communities increases (Kofman and Senge). In a learning community, we begin to commit to a vision for creating a world in which we would like to live and work. It is a vision that speaks to a world of increasing interdependency and change. It is not what the vision is but what the vision does that matters.

According to Senge (1990), learning communities learn to innovate constantly by paying attention to five "component technologies" or disciplines. These disciplines are never mastered; learning communities practice them continuously. The word "discipline" comes from the latin disciplina, meaning "to learn." A discipline is a body of practice that is based on some underlying theory of understanding of the world and that suggests a path of development. Senge believes that discipline is the method by which we draw out that which is in us. Systems thinking, for example, is a discipline that can have an impact only if people are serious about developing their capabilities to practice it.

The first discipline, systems thinking, helps us to see patterns and to learn to reinforce or change those patterns effectively. We tend to usually focus on isolated parts of the system instead of the whole, and then wonder why our efforts at solving problems or perpetuating success fail. A good candidate for systems thinking is college enrollment management. To approach this important task properly, members of the college learning community need to consider all of the components of college enrollment strategy: admissions, financial aid, marketing, recruitment, student demographics, and much more. Enrollment strategy is no longer simply the concern of the admissions director or the financial aid officer, as was the case in prior eras of fragmented management. Systems thinking is a discipline for seeing wholes. It is a framework for seeing interrelationships in the learning community rather than things, for seeing patterns of change rather than static snapshots. Systems thinking also fuses the other four disciplines into a coherent whole.

The second discipline, personal mastery, implies a high level of proficiency. Senge (1990) suggests that in seeking personal mastery we approach life in much the same manner as an artist approaches his or her work. In the learning community we clarify and deepen our vision, focus our energy toward the common good, and develop patience with ourselves and others. The roots of personal mastery lie in Eastern and Western traditions as well as secular traditions. Personal mastery is the discipline that connects our personal learning with the learning of the community as a whole.

According to Senge (1990), our understanding of the world and the actions we take in it are based on notions and assumptions that may reside deeply in our psyche. We may not be

aware of the effect these models have on our perception and behavior; yet they have the power to move us forward or hold us back. In any learning community, this third discipline controls what people perceive can or cannot be done. Change rarely takes place until members of the community change their shared mental models.

Senge (1990) points out that in any learning community a fourth discipline, shared vision binds people around a common identity and sense of destiny. A genuine vision causes people to do things because they want to, not because they have to.

Finally, learning communities practice the discipline of group or team learning. Senge (1990) suggests that through team learning, the whole becomes smarter than the parts. A central feature of this discipline is the power of dialogue (Isaacs, 1994). According to Isaacs, the way people talk together in learning communities is rapidly becoming acknowledged as central to the creation and management of knowledge. Dialogue, the discipline of collective learning and inquiry, is a process for transforming the quality of conversation and the thinking that lies behind it. As Senge et al.(1994) note, ". . . the capacity for great conversations about things that matter is essential for breakthrough thinking and collaborative innovation." (p. 353).

In addition to the five disciplines, Senge et al.(1994) have identified additional core processes that are core to creating and sustaining learning communities. Vital learning communities are capable. They encourage learning and improvement among their members as a collective endeavor. Mutual commitment is essential to sustaining learning communities, and therefore guiding principles must be clear and present to all. In effective learning

communities, all members have the opportunity to see clearly how their contribution to the whole is both desired and essential. Continuity is an important attribute of successful learning communities. In a global village, continuity becomes a greater challenge as members move from one learning community to another. Bellah et al. (1985) and Senge et al. (1994) underscore the importance of communities of memory. Communities have a history, and in effective learning communities their members take care to effectively share their stories with new members of the community. Finally, learning communities effectively collaborate as a means of developing reliable interdependence. In a sense, collaboration has the potential of creating a network of learning communities through the involvement and engagement of stakeholders.

Wheatley (1994) has written,"The dance of this universe extends to all the relationships we have. Knowing the steps ahead of time is not important; being able to engage with the music and move freely onto the dance floor is what's key" (pp. 142-143). Creating and sustaining learning communities enables us to dance to the ever - changing rhythm of the world's music.

REFERENCES

Bellah, R. N., Madsen, R., Sullivan, W. P., Swidler, A., & Tipton, S. M. (1985). Habits of the heart: Individualism and commitment in American life. New York: Harper & Row.

Bennis, W. G. (1993). An invented life. Reading, MA: Addison-Wesley.

Galbraith, M. W. (Ed.). (1990). Education through community organizations. New Directions for Adult and Continuing Education, 40, 3-10.

Gardner, J. W. (1990). On leadership. New York: The Free Press.

Isaacs, W. (1994). Dialogue: The power of collective thinking. In K. T. Wardman (Ed.), Reflections on creating learning organizations (pp. 83-93). Cambridge, MA: Pegasus Communications.

Kofman, F., & Senge, P. M. (1993). Communities of commitment: The heart of learning organizations. Organizational Dynamics, 22(2), 5-22.

Kouzes, J. M. & Posner, B. Z. (1994). Credibility. San Francisco: Jossey-Bass.

Peck, M. S. (1987). The different drum: Community making and peace. New York: Simon & Schuster.

Ryan, S. (1994). The emergence of learning communities. In K. T. Wardman (Ed.), Reflections on creating learning organizations (pp. 95-105). Cambridge, MA: Pegasus Communications.

Senge, P. M. (1990). The fifth discipline: The art and practice of the learning organization. New York: Doubleday.

Senge, P. M. (1994). Creating quality communities. Executive Excellence, 11(6), 11-13.

Senge, P. M., Kleiner, A., Roberts, C., Ross, R. B., & Smith, B. J. (1994). The fifth discipline fieldbook: Strategies and tools for building a learning organization. New York: Doubleday.

Solomon, C. M. (1994). HR facilitates the learning organization concept. Personnel Journal, 73(11), 56-66.

Warren, R., & Lyon, L. (Eds.). (1988). New perspectives on the American community (5th ed.). Chicago: Dorsey.

Wheatley, M. (1994). Leadership and the new science: Learning about organization from an orderly universe. San Francisco: Berrett-Koehler.

CREATING AND SUSTAINING LEARNING COMMUNITIES

THE ELECTRONIC LEARNING COMMUNITY

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An essay presented to Nova Southeastern University

as an entry for the

PHE Scholars Program

May, 1995

THE ELECTRONIC LEARNING COMMUNITY

Traditional Learning Communities

Informal learning communities have existed for centuries as small groups of people with a common interest get together to discuss and explore common issues and to learn collectively. It is a well-known truism that the learning of the group is greater than the learning of one individual. (Senge, 1990). However, in post modern society, we have become so alienated and isolated from each other that we have had to artificially recreate these natural learning networks under the guise of "learning communities."

With the exception of a few residential liberal arts colleges, where learning communities seem to exist naturally, most colleges and universities do not have spontaneous learning communities. In these few spontaneously occurring learning communities, students tend to be young and full time. However, the majority of students on our campuses today are part-time, in their mid twenties (or older), have jobs and families, are probably women and from minority groups. (Gabelnick, MacGregor, Matthews, and Smith, 1990).

Learning is not a "way of life" for these students. Instead, it is something that they fit into their busy lives. Thus they are likely to experience learning in a fragmented fashion and may have difficulty "making sense" of what they are learning. Often, the curriculum adds to this. Courses are fragmented, rarely interdisciplinary, and don't generally add to the sense of students' connectedness with others and with the world of knowledge. Gabelnick et al. (1990) point out "large, impersonal, bureaucratic, and fragmented, the American college is often an educational community only in theory". (p.9).

Changes in the Nature of Learning

As well, the nature of knowledge is changing. We, the products of a print based generation, increasingly are teaching students who are the product of a computer based generation. This has a fundamental impact on us as teachers, our institutions, and our concepts of "truth." We need to rethink the nature of "truth," and the purpose of education. Workers of the future will be knowledge workers and we need to look at the implications for teaching/learning of this fundamental (and radical) change in society. It is clear that we cannot be "professors" any longer. Instead we must join with our students as joint seekers of knowledge (exactly what learning communities do).

A new kind of literacy is emerging - that of the computer. We are a generation in transition. As the products of a print based generation we will teach a generation that will be computer based. We will be forced to teach in ways that we have not been taught. This has profound implications for the production of knowledge as well as the transmission of knowledge.

Spender (1994) claims that there are conflicting notions of "truth" between the generations. Our generation sees that what was first known as truly known (the sacred texts). The next generation will see what is first known as best known (television and computers). We need to learn from the past. Five hundred years ago, the invention of the Guttenberg press also revolutionized educational practice as we shifted from an oral to a printed tradition. Education became democratized as knowledge became not the province of a few but open to many

This shift, from a static source of information (print) to a fluid one (computers), will fundamentally change society and the notion of what is real and true. We have been trained to regard what is printed as being knowledge, but the generation we will be teaching regards only recent knowledge (available through computers and television) as real and true. Note the change from "tape at 5" to "live at 5." News is created as we watch it. We no longer need to wait until the next morning to read it in order to know it.

Drucker (1994) claims that the worker of the future will be a knowledge worker rather than an industrial worker. The new workers will not need to "know" all that they have to before starting a job. What they will need to know is where and how to find the information that they need to do their job. The new worker will need to know how to process information rapidly and where to get the latest, most up-to-date information quickly. The new worker will view education as "lifelong," as the knowledge base constantly shifts and is updated. Many of the new workers will be "telecommuters," producing work without ever leaving their homes.

The Electronic Learning Community

Students in the new classroom and the new learning community may never meet face to face. Technology will improve to support learning. Electronic mail, even in its current stage is a form of learning community. It fits most definitions, except for criteria of size and face to face interaction. In a world increasingly marked by isolation and one way communication (television for example), electronic mail is two way communication. If learning communities

are a possible structural response to the fragmentation that currently exists in institutions of higher education, then electronic mail can be a means to overcome these structural difficulties and create and sustain learning communities.

As education itself becomes more technology driven, the definition of the community will change. Currently, learning communities are considered to involve face to face interaction. New forms of technology used for teaching, such as interactive technologies (i.e. pictel), mean that the community can be geographically widespread. One of the considerations in using technology is the lack of interpersonal cues that face to face interaction provides in explaining and moderating our communication. "Smileys" (or computer generated cues) become the equivalent of non-verbal communication. Within a few years, it is not unreasonable to expect electronic mail to include sound and/or pictures.

Computer discussion lists (commonly called listserv's) are good examples of natural learning communities. A group of people, generally geographically dispersed, but who have a common interest talk to each other about their fields. What is this but a learning community? Frequent contributors begin to take on a personae that is well known by the readers of the lists (as are the frequent contributors in a face to face learning community). People who rarely contribute, the silent, are called "lurkers" in electronic mail language. Then again, the silent group member in a learning community is no different. One doesn't know if they are truly taking in learning if they are silent; and one doesn't know if lurkers are reading their mail or simply signed up on a list.

The discussion group is egalitarian, rank is not clear. Sometimes these are leaderless groups (unmoderated); others are moderated (such as AEDNET) and thus have a leader. Sometimes the "student" puts forth an idea which the "professionals" have not conceived of. Those who are "learning" often see things more clearly (and with fewer preconceptions) than those of us who have been in a field for years.

Electronic mail tends to broaden horizons; the learning community becomes the "global village." Participants in discussion group often are from around the world. Our artificially created learning communities do not usually have the benefit of global participation.

The issue of knowledge being outmoded as soon as it is created is a very real one that we all have to face today. Through electronic mail we can connect with others in a moment and read the latest breakthroughs in research. Instead of just having access to one library, through the Internet we have access to the libraries of the world.

Barriers to the New Learning Community

We will need to be able to change our teaching/learning styles from that of demanding mastery of information to one of demanding that the student know how to access information. The student and worker of the future will need to be highly computer literate. This will demand both access to computer and high levels of computer literacy. Currently, there are real class and gender differences in the way we view computers and use them. (Harrison & Kelly, 1992; Rogers, 1990; Schwartz, 1993). Middle class children in middle class schools generally have access to computers while students from impoverished backgrounds do not

generally have good access. Males are more likely to be computer literate (and not computer phobic) than women. Thus the computer, rather than being the instrument that levels the playing field in higher education will probably result in making the playing field even more rocky. Lack of access to and fear of computing will probably result in still lower occupational attainments for women and minority groups. (Harris & Kelly, 1992, Spender, 1994).

Creating and Sustaining the New Learning Community

We need to be very careful that a new generation of peasants, technopeasants, are not created. A peasant is one who does have access to or control the means of production. A technopeasant is one who does not have access to computers or who is afraid. If women, and/or the economically deprived and/or minority groups do not have access to and become computer literate and comfortable, they will become the new generation of the underclass. The new ruling classes will be the ones with access to information.

Women have traditionally embraced learning communities as they tend to value collaboration more then men. What were the quilting bees of the nineteenth century but forms of learning communities? Women are more likely to resist technology as long as they see it as isolating.

We need to be careful that we do not become a new generation of Luddites. We need to recognize that the world order is changing and to put aside our old notions of truth. We need to recognize that teaching/learning has undergone a fundamental change. We need to look at

new ways of learning (distance, the interactive classroom, on-line learning, etc.) that make use of the changes in technology and society.

As well, we have to address the issues of access to computers and find ways to insure that the economically and socially disadvantaged have access to technology. We need to find ways that ensure that women and girls become less computer and technologically phobic.

If we are to sustain learning communities, then we must find ways of making them accessible to all, not just those enroled in a particular course of study, or who are in the first year of a program, or who are full-time students, or who are young. Judicious use of, and access to electronic mail, can open to doors for all to become members of the learning community.

REFERENCES

Drucker, P.F. (November, 1994). The age of social transformation. Atlantic Monthly. 274,5. pp. 53-94.

Gabelnick, F., MacGregor, J., Matthews, R.S., & Smith, B.L. (1990). Learning communities: Creating connections among students, faculty, and disciplines. San Francisco, CA.: Jossey Bass, Inc.

Harrison, A.W., & Kelly, R. (1992). The influence of individual differences on skill in end-user computing. [on line]. Journal of Management Information Sciences. 9,1. pp 93-111. Available: ABI/Inform No. 93-14179

Rogers, S.M., (1990). Educational applications of the NREN. [on-line]. Educom Review. 28,2. Available: gopher EDUCOM.EDU

Schwartz, H.J., (1993). Planning for the new majority students. [on-line]. Educom Review. 28,2. Available: gopher EDUCOM.EDU

Senge, P.M. (1990). The fifth discipline: The art and practice of the learning organization. New York: Doubleday.

Spender, D. (1994, November). From learner to user: The role of the computer in changing learning and theory. Paper presented at the meeting of the Council for Adult and Experiential Learning, Washington, DC.

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